

1. (Currently amended) A collapsible vehicle safety seat kinematically restraining occupant's body while maintaining the propulsive characteristics and ~~extending the time reaction of the seat and its occupants to the impact by acting in isolation from colliding~~ positioning occupants in an optimum seating position during car impact modes vehicle, the seat comprising, in combination:

a movable seat cushion interacting with an actuator pivot frame and a movable internal seat cushion frame;

a movable seat back and headrest interacting with a movable internal seat back frame and an upper movable link;

a stationary internal seat frame engaged with said movable, internal seat back frame and said movable internal seat cushion frame allowing vertical rotation;

an actuator ~~guide~~ pivot frame interconnecting said movable seat frame;

an electronically ~~activated trigger~~ activation means for vertical movement of said actuator pivot frame wherein said electronic activation means comprises an electronically operated actuator allowing said movable seat cushion said seat back and said headrest instant vertical movement from a stationary to a deployed position creating a zone restraining said occupants kinematics during impact;

a support structure having opposing lateral first and

second sides interconnecting said movable internal seat back frame and said movable internal seat cushion frame by a lower and upper pivot pin and a movable bolt ~~actuator frame~~;

a guide slot interposed on ~~the both~~ said sides of said support structure for said movable bolt travel, said movable bolt engaged with a belt allowing vertical movement;

an actuator spring fixedly secured on a bracket;

an encapsulated support structure bottom plate cooperative with a plurality of isolation pans containing a resilient material, said plurality of isolation pans attached to a seat adjusting mechanism.

2. (Cancelled)

3. 2. (Currently amended) The collapsible seat in accordance with Claim 2 1, wherein said electronically operated actuator ~~means~~ comprises a car crash sensor and collision avoidance feature automatically activating said actuator pivot frame and said movable internal seat cushion frame and said movable internal seat back frame to interact with said movable ~~frame~~ seat cushion, said seat back and said headrest ~~to~~ creating said zone restraining occupants kinematics.

4. 3. (Currently amended) The collapsible seat in accordance with Claim 3 2, wherein said ~~automatic activation~~ ~~means~~ electronically operated actuator further comprises an electronically controlled trigger wire ~~with electronically~~

~~controlled unit to provide~~ing required force from a biasing means, electromagnetic or pyrotechnic, ~~devices~~ to create said zone between said stationary internal seat frame ~~occupant~~ and said ~~collapsible~~ movable seat cushion, seat back and headrest.

5. 4. (Currently amended) The collapsible seat for restraining occupants kinematics in accordance with Claim 4 3, wherein said ~~collapsible~~ means means to collapse said collapsible seat comprises an actuator pivot link and movable bolt traveling vertically into guide slot interposing on the both sides of ~~the~~ said support structure.

6. 5. (Currently amended) The collapsible seat for restraining occupants kinematics in accordance with Claim 1 wherein a said plurality of isolation pans attached to said seat adjustment mechanism ~~positioned on said adjusting mechanism~~ and ~~encapsulated bottom~~ support structure isolates said collapsible seat assembly from impacted vehicle to diminish said seat reaction to the impact.

7. 6. (Currently amended) The collapsible seat for restraining occupants kinematics in accordance with Claim 6 5, wherein said plurality of isolation pans contain resilient material for the ~~gradual diminishing of horizontal and omni-directional motion to minimize reaction to the impact~~ absorption of crash energy and minimalization of interaction between said seat and said vehicle.

APPLICANT'S INVENTION

A collapsible vehicle seat is essentially designed to restrain movement of the occupant especially at the time of frontal, rear-end and lateral collisions in high and low speed or when an impact becomes inevitable. The seat includes an actuator controlled and operated electronically or manually. The onset of the collision sequences the car crash sensor or collision avoidance devices including occupant voice activated actuator. The trigger release forces a biasing means or equivalent device electromagnetic or pyrotechnic to deploy instantly pivoting a frame incorporated with movable seat cushion, seat back and headrest. The alteration of a movable seat assembly from a normal stationary position creates a safety zone that allows occupants to lower their center of gravity before ejection, whiplash or ramming occurs. The dynamic seat restraint of the occupant and improves safety performance of the seat belt integrated with movable seat cushion and seat back. An isolation mount pan dissipates crash energy and minimizes interaction between vehicle and seat. The seat bottom support structure is encapsulated into an isolation mount pan. The plurality mount pans contains a resilient material to hold the seat support structure in proper position and delay response of the seat to the impacted vehicle. The isolation performance of the mount pan improves the vehicle absorbing energy devices

including a crumple zone. The isolation mount pan is affixed to the seat adjustment mechanism in conventional manner.

THE REJECTION

The Abstract is objected to for typographical error and for the fact that it contains legal phraseology.

Claims 1-7 are rejected under 5 U.S.C. §112 for being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 2-7 have been indicated to be allowable if rewritten to overcome the rejection under 35 U.S.C. §112 and to include all the limitations of the base claim and any intervening claims. Claim 1 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. §112.

DISCUSSION

Applicant gratefully acknowledges the Examiner's indication of allowable subject matter subject to the corrections required under 35 U.S.C. §112. Applicant further gratefully acknowledges the Examiner's detailed analysis of the §112 rejection.

Applicant has amended independent Claim 1 in accordance with the analysis of the Examiner to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has incorporated the limitations of Claim 2 into Claim 1 and cancelled Claim 2.


Applicant has renumbered Claims 3 through 7 in accordance with the cancellation of Claim 2 and has further amended these claims so that the terminology is in agreement with the terminology of Claim 1 and any intervening claims and more particularly points out and distinctly claims the subject matter which Applicant regards as the invention.

Applicant has further submitted a corrected clean Abstract which corrects the objections raised by the Examiner with respect to line 8 and line 12.

In light of the foregoing amendments, Applicant respectfully submits that the Application is in condition for allowance and an early notice of same is respectfully solicited.

Respectfully submitted,

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